

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) ~~A separation~~Separation device (1)-for the separation of constituents (2, 3, 4, 5)-of different density,~~in particular of a well fluids~~ fluid-fed from a well-hole (6), ~~the separation device including~~with a container-(7), a feed line transporting-in which the fluid into the container, the fluid at least partially ~~being~~after entry via at least one feed line (8)-is separated in the container into its constituents (2, 3, 4, 5)-using centrifugal force in the radial direction-(12) and / or using gravitational force in the vertical direction, ~~the separation device further including~~characterised-in that,

a classifier device (11)-is arranged in a lower section (9)-of the container-interior-(10), which~~having~~ at least exhibits one discharge line-(13), extending in the radial direction-(12) outwards; for the discharge of the fluid into the container-interior-(10) and a plurality of delivery lines-(14, 15, 16); joined to the container-interior-(10) at different levels in the vertical direction-(17), for the separated fluid constituents-(2, 3, 4, 5).

2. (currently amended) ~~The separation~~Separation device according to ~~claim~~Claim 1, ~~wherein~~characterised-in that the discharge line (13)-is in a generally spiral shape ~~formed~~-at least adjacent to its discharge opening (18)-in an approximate spiral shape.

3. (currently amended) ~~The separation~~Separation device according to ~~claim 1~~Claim 1 or 2, ~~characterised-in that~~ wherein the discharge line (13)-extends from a vertical pipe (19)-of the classifier device-(11), the said vertical pipe-being arranged essentially-centrally in the container-(7).

4. (currently amended) ~~The separation~~Separation device according to ~~claim 3~~claim 3 wherein one-of the previous claims, characterised-in that within the vertical pipe-(19)-a fluid line-(20) terminates within the vertical pipe and~~from which~~ the fluid enters the discharge line-(13) ~~from within~~via the vertical pipe-interior (21).

5. (currently amended) ~~The separation~~Separation device according to ~~claim 3~~claim 3 wherein one-of

~~the previous claims, characterised in that the vertical pipe (19) is subdivided in the longitudinal direction (22) into a plurality of pipe sections (23, 24, 25, 26), separated from one another, whereby the fluid feed line terminating (20) terminates in a first lower pipe section (23) and each of the further pipe sections above the first pipe section having at least one of the delivery lines communicating with the each of the further pipe sections (14, 15, 16) are arranged with their entry ends (27, 28, 29) in each case in further pipe sections (24, 25, 26) above the first pipe section (23).~~

6 (currently amended) ~~The separation~~Separation device according to claim 3 further including~~one of the previous claims, characterised in that entry openings (30) are formed in a the pipe casing (31) of the vertical pipe (19) at least in the region of the further pipe sections (24, 25, 26).~~

7. (currently amended) ~~The separation~~Separation device according to claim 5 ~~one of the previous claims, characterised in that~~wherein a length (32) of the pipe sections (23, 24, 25, 26) is variable.

8. (currently amended) ~~The separation~~Separation device according to claim 5 ~~wherein one of the previous claims, characterised in that the pipe sections (23, 24, 25, 26) are separated by intervening bottoms (33).~~

9. (currently amended) ~~The separation~~Separation device according to claim 3 including~~one of the previous claims, characterised in that two discharge lines (13, 34), extending from the vertical pipe and being generally~~essentially coil shaped radially outwards and extending~~running~~ vertically upwards, ~~extend from the vertical pipe (19).~~

10. (currently amended) ~~The separation~~Separation device according to claim 1 ~~wherein one of the previous claims, characterised in that the discharge line has (13, 34) exhibits a number of openings, in particular on its outer side, generally~~essentially in the radial direction.

11. (currently amended) ~~The separation~~Separation device according to claim 3 ~~wherein one of the previous claims, characterised in that the classifier device has (11) exhibits at least one blade segment (37) protruding radially outwards from the vertical pipe (9).~~

12. (currently amended) ~~The separation~~Separation device according to claim 11 wherein one of the previous claims, characterised in that the blade segment has (37) exhibits openings (38) for the accommodation and / or mounting of the discharge line (13, 34).

13. (currently amended) ~~The separation~~Separation device according to claim 12 wherein one of the previous claims, characterised in that the openings (38) are arranged along a radial outer end section (39) of the blade segment (37).

14. (currently amended) ~~The separation~~Separation device according to claim 13 wherein one of the previous claims, characterised in that the openings (38) are formed as a partially open edge recess (40) of the blade segment (37).

15. (currently amended) ~~The separation~~Separation device according to claim 3 wherein one of the previous claims, characterised in that the container has (7) exhibits a bottom plate (35) enclosing the vertical pipe (19) with outlet openings (36) for at least the fluid constituent (2) with the greatest density.

16. (currently amended) ~~The separation~~Separation device according to claim 3 wherein one of the previous claims, characterised in that the delivery lines (14, 15, 16) within the vertical pipe have generally (19) exhibit essentially vertically extendingrunning line sections (41) which are connected to at least one rotary slide valve (42).

17. (currently amended) ~~The separation~~Separation device according to claim 16 wherein one of the previous claims, characterised in that the line sections (41), following the rotary slide valve (42) and using a multibore connector (43), ~~in particular electrical,~~ can be connected to transport lines (44, 45, 46, 47) for the further transport of the fluid constituents of the well fluids.

18. (currently amended) ~~The separation~~Separation device according to claim 17 wherein one of the previous claims, characterised in that the fluid feed line (20) is connected via the rotary slide valve (42) and electrical multibore connector (43) to a well fluids~~fluid well-hole~~ line (48) which feeds the well fluids~~fluid~~ from the well-hole (6).

19. (currently amended) ~~The separation~~Separation device according to claim 17 wherein~~one of the previous claims, characterised in that~~ a flow control valve-(49), in particular electrical, is arranged in the transport line-(44, 45, 46, 47).

20. (currently amended) ~~The separation~~Separation device according to claim 19 wherein~~one of the previous claims, characterised in that~~ a throttle device-(50) and / or a metering valve-(51) follows the flow control valve-(49).

21. (currently amended) ~~The separation~~Separation device according to claim 5 wherein~~one of the previous claims, characterised in that~~ at least one level sensor is assigned to each pipe section-(23, 24, 25-26).

22. (currently amended) ~~The separation~~Separation device according to claim 3 wherein~~one of the previous claims, characterised in that~~ at least one sensor device-(52) is disposed ~~in~~assigned to an upper end-(53) of the container interior-(10) and / or the vertical pipe interior-(21).

23. (currently amended) ~~The separation~~Separation device according to claim 1 further including~~one of the previous claims, characterised in that~~ at least one feedback line-(54) is provided disposed between the separation device-(1) and the well-hole-(6).

24. (currently amended) ~~The separation~~Separation device according to claim 1 wherein~~one of the previous claims, characterised in that~~ the separation device-(1) is arranged to be replaceable as part of a so-called tree-(55) on the sea bed.

25. (currently amended) ~~The separation~~Separation device according to claim 1 wherein~~at least one of the previous claims, characterised in that~~ the separation device has-(1) exhibits a frame structure-(56) for mounting at least the container-(7), lines-(20, 44, 45, 46, 47, 48), pumps, valves, throttles or similar equipment.

26. (currently amended) ~~The separation~~Separation device according to claim 1 wherein~~one of the previous claims, characterised in that~~ the separation device-(1) is connected to an electrical supply and control unit-(58), particularly adjacent the container-locally.

27. (currently amended) ~~The separation~~Separation device according to claim 1 further ~~including one of the previous claims, characterised in that~~ at least one changeover valve ~~(59), in particular electrical,~~ is arranged in the well fluids feed~~fluid well hole~~ line ~~(48)~~.

28. (currently amended) ~~The separation~~Separation device according to claim 1 further ~~including one of the previous claims, characterised in that~~ a bypass pipeline ~~(60)~~ that branches from the well fluids feed~~fluid well hole~~ line ~~(48)~~.

29. (currently amended) ~~The separation~~Separation device according to claim 1 wherein ~~one of the previous claims, characterised in that~~ the container ~~(7)~~ is essentially spherical or silo-shaped.

30. (currently amended) ~~The separation~~Separation device according to claim 1 wherein ~~one of the previous claims, characterised in that~~ at least the container ~~(7)~~ is of modular construction.

31. (New) A separator for separating the constituents of well fluids from a well, the separator comprising:

- a container housing a plurality of spiral tubes having at least one inlet and selected outlets;
- said at least one inlet receiving the well fluids and using centrifugal force in the radial direction to separate the constituents which exit the selected outlets;
- the constituents separating using gravitational force at different vertical levels in the container in accordance with their different densities;
- a plurality of discharge compartments arranged vertically within the container in accordance with the densities of the constituents; and
- each discharge compartment communicating with a discharge pipe for removing a constituent from the container.

32. (New) The separator of claim 31 wherein the container is integrated with a subsea tree.

33. (New) The separator of claim 31 wherein the constituents include sand, water, and gas and further including a reinjection tree communicating with the discharge pipes whereby such constituents are reinjected into a reinjection well.

34. (New) The separator of claim 32 further including rotary slide valves for controlling flow through the discharge lines.

35. (New) The separator of claim 34 wherein the rotary slide valves are actuated electrically subsea.